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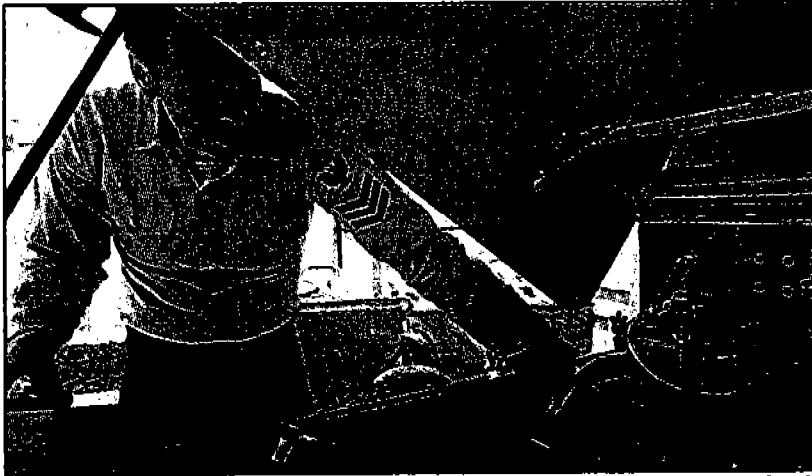
NEWSPAPER ARTICLE "POLLUTION SOLUTIONS AT MAYPORT" NS MAYPORT FL
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The Times-Union, Jacksonville, Tuesday, February 20, 1996

Petty Officer Albert Chemay looks over the TF Purifier replacement on a vehicle at Mayport Naval Station. The new filter, which cuts waste by lengthening oil life, is one of the ways that Mayport has become a leader in making a more environmentally friendly fleet.



— John Pemberton/staff

Pollution solutions at Mayport

By Steve Patterson
Times-Union staff writer

With designer bacteria and invisible streams of light, units at Mayport Naval Station are attacking a long-entrenched enemy: pollution.

A testing site for new anti-pollution technologies, Mayport was named runnerup last week in a Navywide contest for bases that are taking lead roles in environmental innovation.

The award highlights a niche the base has cultivated in recent years, developing environmental initiatives that are being copied at other bases.

The initiatives have ranged from experiments with bacteria that eat toxic waste to unglamorous projects like reorganizing the way sailors handle hazardous materials.

"If we eventually are to reduce pollu-

See POLLUTION, Page B3

Pollution solutions off drawing board into real life

From Page B-1

tion ... let's look at everything," said Capt. Scott Cantfil, Mayport's commander.

The commander of the Atlantic Fleet, Adm. William J. Flanagan, praised the base's work, saying it helped ensure "an environmentally friendly fleet and a better environment."

Mayport has formally been a hub for Navy environmental projects since 1994, when it was designated as one of two bases to develop environmental initiatives.

A number of projects are coming off drawing boards for practical applications that could affect the civilian world.

The bacteria experiment started in December in a field on the base where drums of pesticide had been stored and washed out. Toxic substances including DDT had seeped into the soil. Rather than dig up the polluted dirt and bury it in a landfill, the Navy bought specially cultivated bacteria that feed on chemicals in pesticides. The microbes were poured into the dirt and left to feed and reproduce until they ate all the pesticides, after which they would starve and die.

A contractor who provided the bacteria says the job is done, but the Navy is waiting for soil tests to prove that, said Cheryl Mitchell, an environmental en-

gineer at the base.

Other experiments include cleaning oily water by shining ultraviolet lights that bake out impurities. The method is being tested on water from ship bilges, but with a sizable civilian industry devoted to cleaning oily water, the method could have applications far removed from the Navy.

In a base maintenance center, crews have tested a device that cleans motor oil while it's still in the engine. With the new system, oil that was changed every three to six months can last two to three years without changing, said Petty Officer Albert Chemay. Despite the savings in oil, the cost of the clean-

ing system — \$150 to \$300 unit — may limit the system's uses, said Mike Davenport, other environmental engineer.

Other environmental projects have saved the base millions of dollars, Cantfil said.

For example, hazardous materials like paint and solvents that used to be purchased each ship and unit at the base are now managed by a central warehouse that delivers materials on demand and collects leftovers. By bringing back the leftovers and passing them on to other units, rather than letting them sit unused, the base saved about \$2.6 million on orders supplies in the past three years, according to base estimates.

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